Date: February 11, 1993

File: 3.3.10

Memorandum

RECEIVED PROJECT DEVELOPMENT

To:

ALL DISTRICT DIRECTORS

Attention Deputy District Directors

Operations

Project Development

Construction Maintenance

From:

DEPARTMENT OF TRANSPORTATION

Division of Traffic Operations

Subject: Temporary Railing (Type K) Anchors

Temporary railing (Type K) placed within 2 feet of an excavation is no longer required to be anchored to the pavement. Damage to the pavement, traffic delay, and additional exposure of workers to traffic do not justify the limited advantages of anchors.

Based on crash-test results, accident experience, and present practice, the following guidelines should be followed when placing Type K railing adjacent to excavations.

Two feet of separation between the base of Type K railing and an excavation should be provided whenever possible. Crash tests have shown that unanchored Type K railing can be displaced laterally up to 2 feet when struck.

If a separation of 2 feet is not possible without adversely affecting the traffic flow, a minimum separation of 1 foot may be allowed between Type K railing and an excavation of 2.5 feet or less in depth. The 1-foot separation will provide 2 feet between the edge of the drop-off and the center of gravity of the railing. This will reduce the chance of the railing toppling into the excavation if struck. In addition, this will provide the necessary room for the operation of paving equipment.

If the excavation depth is greater than 2.5 feet, a minimum separation of 2 feet must be provided. The additional separation is justified, based on the added risk if the railing is toppled into the deeper excavation.

Unique circumstances or alternate methods of Type K railing restraint may justify exceptions to this policy. Requests for exceptions should be submitted to the Division of Traffic Operations, attention Traffic Reviewers.

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Type K railing placed on bridges within 2 feet of the edge will continue to require anchors to restrict lateral movement.

Any questions regarding these policies should be referred to Mr. Jack Summers at CALNET 8-464-7055.

JAMES B. BORDEN, Chief Division of Traffic Operations

I CONCUR:

JOHN A. APOSTOLOS, Chief Division of Construction

cc: Mr. Lloyd Rue

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